



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-6673; Directorate Identifier 2015-NM-092-AD]

RIN 2120-AA64

Airworthiness Directives; Ameri-King Corporation Emergency Locator Transmitters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Ameri-King Corporation emergency locator transmitters (ELTs) as installed on various aircraft. This proposed AD was prompted by multiple reports of ELT failure. This proposed AD was also prompted by a report of noncompliance to quality standards and manufacturer processes related to Ameri-King Corporation ELTs. Failure to adhere to these standards and processes could result in ELTs that do not function. This proposed AD would require repetitive inspections of the ELT for discrepancies; repetitive checks, tests, and verifications, as applicable, to ensure that the ELT is functioning; and corrective actions if necessary. This proposed AD also allows for optional replacement of affected ELTs and, for aircraft on which an ELT is not required by operating regulations, optional removal of affected ELTs. We are proposing this AD to detect and correct nonfunctioning ELTs, which could delay or impede the rescue of the flightcrew and passengers after an emergency landing.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Ameri-King Corporation, 17881 Sampson Lane, Huntington Beach, CA 92648; telephone: 714-842-8555; fax: 714-842-4235; Internet: <http://ameri-king.com>; email: ameriking9@aol.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6673; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Gilbert Ceballos, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5372; fax: 562-627-5210; email: gilbert.cebillos@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2016-6673; Directorate Identifier 2015-NM-092-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We received multiple reports of ELT failure (73 reported ELT failures). We also received a report of noncompliance to quality standards and manufacturer processes related to Ameri-King Corporation ELTs. Failure to adhere to these standards and processes could result in ELTs that do not function. ELT failure, if not corrected, could delay or impede the rescue of the flightcrew and passengers after an emergency landing.

Emergency Cease and Desist Order Issued to Ameri-King Corporation

We have determined that Ameri-King Corporation manufactured, sold, or distributed parts and articles that do not conform to an approved design but were represented as FAA-approved for installation on FAA type-certificated aircraft. Investigation of the production issues identified that Ameri-King Corporation violated multiple FAA regulations and falsified documents used to show compliance with FAA regulations. Therefore, we issued an emergency cease and desist order, dated

December 28, 2015, to Ameri-King Corporation that terminates their technical standard order authorization (TSOA) and parts manufacturer approval (PMA).

The FAA's emergency cease and desist order requires Ameri-King Corporation to immediately cease and desist manufacturing, selling, and distributing any articles for installation on FAA type-certificated aircraft, which would include advertising, repairing, rebuilding, and altering any articles intended for installation on type certificated products. Any parts and articles produced by Ameri-King Corporation before December 28, 2015, may not conform to an approved design. Any parts and articles produced by Ameri-King Corporation on or after that date were produced without an FAA production approval and contrary to the FAA's emergency cease and desist order.

We might consider additional rulemaking to address other parts and articles that were produced by Ameri-King Corporation with falsified testing records and without complying with its FAA-mandated quality assurance procedures; such non-compliant parts and articles could result in an unacceptable hazard to aviation safety.

Related Service Information under 1 CFR part 51

We reviewed Ameri-King Corporation Document IM-450, "INSTALLATION & OPERATION MANUAL," Revision A, dated October 18, 1995; and Ameri-King Corporation Document IM-451, "INSTALLATION AND OPERATION MANUAL," Revision NC-4.1h, dated July 5, 2014. The service information describes procedures for inspections of the ELT for discrepancies; checks, tests, and verifications to ensure the ELT is functioning; and corrective actions. Corrective actions include replacing affected parts. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under "Differences Between this Proposed AD and the Service Information."

Differences Between this Proposed AD and the Service Information

Ameri-King Corporation Document IM-450, "INSTALLATION & OPERATION MANUAL," Revision A, dated October 18, 1995; and Ameri-King Corporation Document IM-451, "INSTALLATION AND OPERATION MANUAL," Revision NC-4.1h, dated July 5, 2014; specify accomplishing certain inspections of the ELT but do not specify corrective actions for any finding of the following discrepancies: unsecured fastener or mechanical assembly, cuts or abrasions on the coaxial cable outer jacket, corrosion on the "BNC" connectors and mating plug on the antenna and the ELT main unit, wear or abrasion on the modular cable outer jacket, corrosion on the jack and plug of the modular connecting cable, and corrosion on the battery compartment. This proposed AD would require repairing any discrepancy found during the inspections.

Ameri-King Corporation Document IM-450, "INSTALLATION & OPERATION MANUAL," Revision A, dated October 18, 1995, specifies doing a functional test, a verification that the G-switch is working, and an activation check, but does not specify corrective actions for any findings. If there are any findings during the test, verification, or check, this proposed AD would require replacing the affected ELT with another serviceable FAA-approved ELT.

Ameri-King Corporation Document IM-451, "INSTALLATION AND OPERATION MANUAL," Revision NC-4.1h, dated July 5, 2014, specifies doing an operational test, G-switch and antenna checks, a digital message verification, a registration verification, and verification of ELT and global positioning system (GPS) interface, but does not specify corrective actions for any findings. If there are any findings during the test, checks, or verifications, this proposed AD would require replacing the affected ELT with another serviceable FAA-approved ELT.

Costs of Compliance

We estimate that this proposed AD affects 14,500 ELTs installed on various aircraft of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

| Action | Labor cost | Cost per product | Cost on U.S. operators |
|---|---|----------------------------|----------------------------------|
| Inspections, checks, tests, and verifications | 2 work-hours X \$85 per hour = \$170 per inspection cycle | \$170 per inspection cycle | \$2,465,000 per inspection cycle |

We estimate the following costs to do any necessary replacements that would be required based on the results of the proposed inspections, checks, tests, and verifications. We have no way of determining the number of aircraft that might need these replacements.

On-condition costs

| Action | Labor cost | Parts cost | Cost per product |
|---------------|--------------------------------------|---------------------------|---------------------------|
| Replacement | 4 work-hours X \$85 per hour = \$340 | Between \$600 and \$1,500 | Between \$940 and \$1,840 |

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Ameri-King Corporation: Docket No. FAA-2016-6673; Directorate Identifier 2015-NM-092-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Ameri-King Corporation Model AK-450-() and AK-451-() series emergency locator transmitters (ELTs). This appliance is installed on, but not limited to, aircraft identified in table 1 to paragraph (c) of this AD.

Table 1 to paragraph (c) of this AD – *Certain aircraft that might have affected ELTs installed*

| Aircraft | ELT Model |
|-------------------|-----------|
| Airbus rotorcraft | AK-451 |

| Aircraft | ELT Model |
|---|-------------------|
| American Champion Aircraft Corp. airplanes | AK-450 and AK-451 |
| Aviat Aircraft Inc. airplanes | AK-450 |
| Beechcraft Corporation airplanes | AK-451 |
| Bell Helicopter Textron Canada Limited rotorcraft | AK-451 |
| Bombardier Inc. airplanes | AK-451 |
| Cessna Aircraft Company airplanes | AK-451 |
| Cirrus Design Corporation airplanes | AK-451 |
| Diamond Aircraft Industries Inc. airplanes | AK-450 and AK-451 |
| Eclipse Aerospace Inc. airplanes | AK-451 |
| Embraer S.A. airplanes | AK-451 |
| KitFox Aircraft LLC (formerly SkyStar Aircraft Corporation and also Denney Aerocraft Company) airplanes | AK-450 |
| Luscombe Aircraft Corporation airplanes | AK-450 and AK-451 |
| Mooney Aircraft Corporation airplanes | AK-450 |
| Piper Aircraft Inc. airplanes | AK-451 |
| Robinson Helicopter Company rotorcraft | AK-451 |
| Sikorsky Aircraft Corporation rotorcraft | AK-451 |
| SOCATA, S.A., Socata Groupe Aerospatiale airplanes | AK-450 |
| Twin Commander Aircraft LLC airplanes | AK-451 |

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 2562, Emergency Locator Beacon.

(e) Unsafe Condition

This AD was prompted by multiple reports of ELT failure. This AD was also prompted by a report of noncompliance to quality standards and manufacturer processes

related to Ameri-King Corporation ELTs. Failure to adhere to these standards and processes could result in ELTs that do not function. We are issuing this AD to detect and correct nonfunctioning ELTs, which could delay or impede the rescue of the flightcrew and passengers after an emergency landing.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Repetitive Actions and Corrective Actions

Within 12 months after the effective date of this AD, do general visual inspections of the ELT for discrepancies; checks, tests, and verifications, as applicable, to ensure the ELT is functioning; and all applicable corrective actions; in accordance with section 3.4, “Periodic Maintenance” of Ameri-King Corporation Document IM-450, “INSTALLATION & OPERATION MANUAL,” Revision A, dated October 18, 1995; or Ameri-King Corporation Document IM-451, “INSTALLATION AND OPERATION MANUAL,” Revision NC-4.1h, dated July 5, 2014; as applicable; except as required by paragraph (h) of this AD. Do all applicable corrective actions following 14 CFR 91.207(a), 14 CFR 91.207(f), and other applicable operating rules after accomplishing the inspections, checks, tests, and verifications. Repeat the inspections and applicable checks, tests, and verifications thereafter at intervals not to exceed 12 months until the terminating action specified in paragraph (j) of this AD is done.

(h) Exceptions to Service Information

(1) If, during any action required by paragraph (g) of this AD, any ELT fails the functional test specified in step 6., the verification specified in step 7., or the activation check specified in step 8., of section 3.4, “Periodic Maintenance,” of Ameri-King Corporation Document IM-450, “INSTALLATION & OPERATION MANUAL,” Revision A, dated October 18, 1995, replace the affected Model AK-450-() ELT with a serviceable FAA-approved ELT as specified in paragraph (i) of this AD (“Definition of

Serviceable FAA-approved ELT”), following 14 CFR 91.207(a), 14 CFR 91.207(f), and other applicable operating rules.

(2) If, during any action required by paragraph (g) of this AD, any ELT fails any of the actions specified in paragraphs (h)(2)(i) through (h)(2)(v) of this AD, replace the affected Model AK-451-() ELT with a serviceable FAA-approved ELT as specified in paragraph (i) of this AD (“Definition of Serviceable FAA-approved ELT”), following 14 CFR 91.207(a), 14 CFR 91.207(f), and other applicable operating rules.

(i) The operational test specified in step 3.4.6 of section 3.4, “Periodic Maintenance,” of Ameri-King Corporation Document IM-451, “INSTALLATION AND OPERATION MANUAL,” Revision NC-4.1h, dated July 5, 2014.

(ii) Any check specified in step 3.4.7 of section 3.4, “Periodic Maintenance,” of Ameri-King Corporation Document IM-451, “INSTALLATION AND OPERATION MANUAL,” Revision NC-4.1h, dated July 5, 2014.

(iii) The digital message verification specified in step 3.4.8 of section 3.4, “Periodic Maintenance,” of Ameri-King Corporation Document IM-451, “INSTALLATION AND OPERATION MANUAL,” Revision NC-4.1h, dated July 5, 2014.

(iv) The registration verification specified in step 3.4.9 of section 3.4, “Periodic Maintenance,” of Ameri-King Corporation Document IM-451, “INSTALLATION AND OPERATION MANUAL,” Revision NC-4.1h, dated July 5, 2014.

(v) The verification of the ELT and global positioning system (GPS) interface specified in step 3.4.10 of section 3.4, “Periodic Maintenance,” of Ameri-King Corporation Document IM-451, “INSTALLATION AND OPERATION MANUAL,” Revision NC-4.1h, dated July 5, 2014.

(3) If, during any action required by paragraph (g) of this AD, any of the discrepancies specified in paragraphs (h)(3)(i) through (h)(3)(vi) of this AD are found,

repair all discrepancies following 14 CFR 91.207(a), 14 CFR 91.207(f), and other applicable operating rules.

(i) Any unsecured fastener or mechanical assembly.

(ii) Any cuts or abrasions on the coaxial cable outer jacket.

(iii) Any corrosion on the “BNC” connectors and mating plug on the antenna and the ELT main unit.

(iv) Any wear or abrasion on the modular cable outer jacket.

(v) Any corrosion on the jack and plug of the modular connecting cable.

(vi) Any corrosion on the battery compartment.

(4) If, during any action required by paragraph (g) of this AD, any non-functioning battery is found, replace non-functioning batteries with non-rechargeable batteries identified in paragraph (h)(4)(i) or (h)(4)(ii) of this AD, as applicable, following 14 CFR 91.207(a), 14 CFR 91.207(f), and other applicable operating rules.

(i) For AK-450 ELTs: For the remote cockpit switch, use a 3-volt lithium battery. For the ELT main unit, use four D cell (1.5 volt) alkaline batteries.

(ii) For AK-451 ELTs: For the remote cockpit switch, use a 3-volt lithium battery. For the ELT main unit, use either four D cell lithium (LiMnO₂) batteries or four D cell lithium (LiSO₂) batteries.

(i) Definition of Serviceable FAA-approved ELT

For the purposes of this AD, a serviceable FAA-approved ELT is any FAA-approved ELT other than a Model AK-450-() and AK-451-() series ELT produced by Ameri-King Corporation.

(j) Optional Terminating Action

Doing the applicable action specified in paragraph (j)(1) or (j)(2) of this AD terminates the actions required by paragraphs (g) and (h) of this AD.

(1) For aircraft required by operating regulations to be equipped with an ELT:

Replace the ELT with a serviceable FAA-approved ELT as specified in paragraph (i) of this AD (“Definition of Serviceable FAA-approved ELT”).

(2) For aircraft not required by operating regulations to be equipped with an ELT: Replace the ELT with a serviceable FAA-approved ELT as specified in paragraph (i) of this AD (“Definition of Serviceable FAA-approved ELT”). The ELT may be removed as an alternative to the ELT replacement; if an ELT is re-installed, it must be a serviceable ELT as specified in paragraph (i) of this AD (“Definition of Serviceable FAA-approved ELT”).

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (l)(1) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(l) Related Information

(1) For more information about this AD, contact Gilbert Ceballos, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Boulevard, Lakewood, California 90712-4137; phone: 562-627-5372; fax: 562-627-5210; email: gilbert.cebillos@faa.gov.

(2) For service information identified in this AD, contact Ameri-King Corporation, 17881 Sampson Lane, Huntington Beach, CA 92648; telephone: 714-842-8555; fax: 714-842-4235; Internet: <http://ameri-king.com>; email:

ameriking9@aol.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on May 20, 2016.

Victor Wicklund,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.
[FR Doc. 2016-12852 Filed: 6/2/2016 8:45 am; Publication Date: 6/3/2016]